

EXPLANATION

SEDIMENTARY ROCKS

Qal

Stream gravel, sand, and silt

Qmg

Morainal material, terrace gravel, and talus

UNCONFORMITY

Te

Eska conglomerate

(Alternating beds of conglomerate 5 to 50 feet or more thick and arkosic sandstone in beds a few inches to 40 feet thick)

UNCONFORMITY

Tc

Chickaloon formation

(Shale and sandstone, cut by numerous sills and dikes of gabbro and diabase, some of which are not mapped)

UNCONFORMITY

Km

Matanuska formation

(Shale and sandstone, cut by dikes and sills of gabbro and diabase. As mapped possibly includes some Jurassic beds on north side of Anthracite Ridge)

UNCONFORMITY (?)

Jt

Talkeetna formation

(Volcanic breccia, agglomerate, and tuff)

IGNEOUS INTRUSIVE ROCKS

Tb

Basaltic lava

Ti

Intrusive gabbro, diabase, and basalt

Tsf

Sodic felsite, intrusive

gr

Granite intrusives

D

Fault

(D, Downthrown side)

10

Outcrop of coal bed

(Numbers are explained in text)

QUATERNARY

Miocene (?)

Eocene

Upper Cretaceous

Lower Jurassic

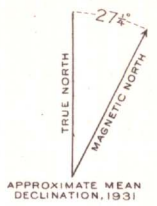
Pliocene (?)

JURASSIC

TERTIARY

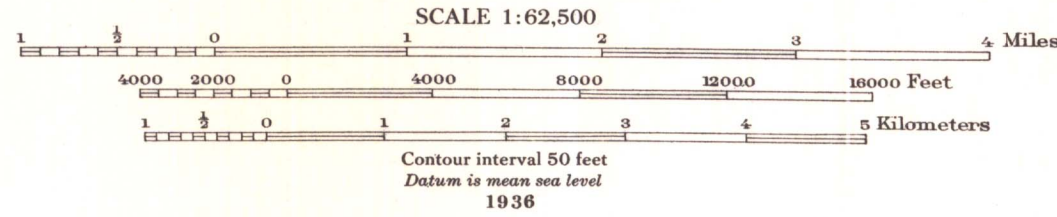
MESOZOIC

Topography by Alaskan branch
L. O. Newsome and R. H. Sargent, topographic engineers.
Geodetic position based upon data by U. S. Coast and Geodetic Survey.
Land lines from data by U. S. General Land Office.
Elevations based upon bench marks established by Alaska Railroad
Areas not surveyed in detail indicated by gray contours.
Surveyed in 1909, 1913, and 1931.



GEOLOGIC MAP OF PART OF UPPER MATANUSKA VALLEY, ALASKA

Surveyed by Alaskan branch in cooperation with Alaska Railroad
Gerald A. Waring, geologist



Geology in parts of district from earlier surveys, principally by S. R. Capps, G. C. Martin, and R. W. Richards.
Surveyed in 1913, 1924, 1931, and 1932.